

AMENDMENTS TO THE SPECIFICATION

IN THE SPECIFICATION:

Please amend the specification by inserting before the first line thereof the following:

This application is a divisional of co-pending Application No. 09/230,799, filed on February 9, 1999, and for which priority is claimed under 35 U.S.C. § 120. Application No. 09/230,799 is the national phase of PCT International Application No. PCT/IB98/00893 filed on June 9, 1998 under 35 U.S.C. § 371. The entire contents of each of the above-identified applications are hereby incorporated by reference. This application also claims priority of Application No. 9702213-1; 9704634-6; and 9800268-6 filed in Sweden on June 10, 1997; December 12, 1997; and January 30, 1998, respectively under 35 U.S.C. § 119.

The paragraph beginning on page 14, line 7, has been amended as follows:

It is also possible to combine amplitude and phase information from different analyzer channels. The amplitude signals $|X_k(rR)|$ may be connected according to Fig. 16, whereas the phase signals $\arg\{X_k(rR)\}$ are connected according to the principle of ~~Fig. 16~~Fig.

15. In this way the lowband frequencies will still be transposed, whereby a periodic repetition of the source region envelope is generated instead of the stretched envelope that results from a transposition according to Eq. 2. Gating or other means may be incorporated in order to avoid amplification of "empty" source channels. Fig. 17 illustrates another application, the generation of sub-harmonics to a highpass filtered or bass limited signal by using connections from higher to lower subbands. When using the above transpositions it may be beneficial to employ adaptive switching of patch based on the characteristics of the signal.

The paragraph beginning on page 22, line 1 has been amended as follows:

Using a standard signal-processor or a powerful PC, real-time operation of a SBR-enhanced codec is possible. The SBR enhanced codec may also be hard-coded on a custom chip. It may also be implemented in various kinds of systems for storage or transmission of signals, analogue or digital, using arbitrary codecs, Fig. 27 and Fig. 28. The SBR-1 method may be integrated in a decoder or supplied as an add-on hardware or software post-processing module. The SBR-2 method needs additional modification of the encoder. In Fig. 27 the analogue input signal is fed to the A/D-converter 2701, forming a digital signal which is fed to the an arbitrary encoder 2703, where source coding is performed. The signal fed into the system may be of

such a low-pass type that spectral bands within the auditory range already have been discarded, or spectral bands are discarded in the arbitrary encoder. The resulting lowband signals are fed to the multiplexer 2705, forming a serial bitstream which is transmitted or stored 2707. The de-multiplexer 2709 restores the signals and feeds them to an arbitrary decoder 2711. The spectral envelope information 2715 is estimated at the decoder 2713 and fed to the SBR-1 unit 2713 2714 which transposes the lowband signal to a highband signal and creates an envelope adjusted wideband signal. Finally, the digital wideband signal is converted 2717 to an analogue output signal.